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War and Urban Terrain in the Twenty-First Century

Williamson Murray

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JAWP

*Ted Gold, Director
Joint Advanced Warfighting Program*

Cities often have been major targets of military operations. In this paper, Williamson Murray examines the political, operational, and logistical reasons that made cities important in past conflict and suggests why this will continue to be so. The spread of urban sprawl throughout the world is only part of the cause; the motivation of adversaries and friends alike to seek refuge in these environments offers a more compelling reason for the US military to give it serious attention.

The desire to avoid operations in cities is quite understandable given the high casualties and carnage that too often have accompanied such operations. However, it would seem unwise to assume we can always avoid such operations. Rather it is prudent to seek ways to do much better in these environments. DoD is striving for major increases in joint war-fighting capabilities; military operations involving urban terrain are a part of that challenge. The formidable obstacles presented by the urban environment are factors that concept development and experimentation will need to address, at the strategic and operational levels, as well as the tactical.

This document is part of the Joint Advanced Warfighting Program's ongoing development of a comprehensive DoD Road Map for future urban operations. A companion paper—*Taking the Revolution in Military Affairs Downtown: New Approaches to Urban Operations*—provides an operational context; another—*Military Operations in Urban Terrain: A Survey of Journal Articles*—summarizes some recent thinking on the subject. The Road Map, scheduled to be completed by the end of June, 2001, will identify programs, experiments and other initiatives needed to provide future joint force commanders with enhanced capabilities to conduct military operations involving urban terrain.

Comments and questions on this paper are invited, and should be directed to:

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Preface

This paper was prepared for the Director, Defense Research and Engineering, in the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics, under the task order Joint Advanced Warfighting Programs (JAWP). It addresses the task order objective of generating advanced joint operational concepts and joint experimentation to assist the Department of Defense in attaining the objectives of Joint Vision 2020. Members of the JAWP contributed to the ideas and review of this report.

The JAWP was established at the Institute for Defense Analyses (IDA) by the Office of the Secretary of Defense and the Joint Staff to serve as a catalyst for stimulating innovation and breakthrough change. The JAWP Team is composed of military personnel on joint assignments from each Service as well as civilian analysts from IDA. The JAWP is located principally in Alexandria, Virginia, and includes an office in Norfolk, Virginia, that facilitates coordination with the United States Joint Forces Command.

This paper does not necessarily reflect the views of IDA or the sponsors of the JAWP. Our intent is to stimulate ideas, discussion, and, ultimately, the discovery and innovation that must fuel successful transformation.

Recent and Forthcoming Publications of the Joint Advanced Warfighting Program

Taking the Revolution in Military Affairs Downtown: New Approaches to Urban Operations, William J. Hurley, IDA Paper P-3593, forthcoming, February 2001.

Red Teaming: A Means for Transformation, John F. Sandoz, IDA Paper P-3580, January 2001.

FY2000 End of Year Report: Volumes I, II, and III, Theodore S. Gold et al., IDA Paper P-3571, November 2000.

US Army and US Marine Corps Interoperability: A Bottom-up Series of Experiments, Rick Lynch, Tom O'Leary, Tom Clemons, and Doug Henderson, IDA Paper P-3537, November 2000.

War and Urban Terrain in the Twenty-First Century, Williamson Murray, IDA Paper P-3568, November 2000.

Developing Metrics for DoD's Transformation, Joel B. Resnick, IDA Document D-2528, October 2000.

Experimentation in the Period Between the Two World Wars: Lessons for the Twenty-First Century, Williamson Murray, IDA Document D-2502, October 2000.

Lessons Learned from the First Joint Experiment (19901), Larry D. Budge and John Fricas, IDA Document D-2496, October 2000.

Military Operations in Urban Terrain: A Survey of Journal Articles, D. Robert Worley, Alec Wahlman, and Dennis Gleeson, Jr., IDA Document D-2521, October 2000.

The Joint Experiment J9901: Attack Operations Against Critical Mobile Targets, Joint Advanced Warfighting Program, September 29, 2000. Prepared for the US Joint Forces Command.

Joint Strike Force Operational Concept, Joint Advanced Warfighting Program, forthcoming, September 13, 2000.

Joint Warfighting Experimentation: Ingredients for Success, James H. Kurtz, IDA Document D-2437, September 2000.

Joint Advanced Warfare Seminar, James H. Kurtz, Daniel E. Moore, and Joel B. Resnick, IDA Document D-2346, July 1999.

Workshop on Advanced Technologies and Future Joint Warfighting, April 8-10, 1999: Summary of Proceedings, William J. Hurley, Phillip Gould, and Nancy P. Licato, IDA Document D-2343, May 1999.

Framework for Joint Experimentation—Transformation's Enabler, Karl Lowe, IDA Document D-2280, January 1999.

Contemplating Military Innovation, Dennis J. Gleeson Jr., IDA Document D-2191, August 1998.

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Introduction

One of the major debates underlying current U.S. defense policy is the question of what many have casually termed “urban operations,” or fighting in cities. Unfortunately, the term itself has become thoroughly misleading. To most defense experts, it now connotes operations in major cities around the world. Not surprisingly, those opposed to the idea of urban operations have conjured up images of U.S. forces fighting their way into and through cities similar to Stalingrad and Berlin, those atrocious and costly battles of World War II. Certainly the record of combat in cities throughout the twentieth century is a gloomy one. Warsaw (1939 and 1944), Leningrad (1941–1942), Stalingrad (1942), Manila (1945), Berlin (1945), Seoul (1950–1951), Hue (1968), Beirut (1982) and Grozny (1995 and 1999 campaigns) all involved unmitigated suffering on the part of victor and vanquished alike.¹ Moreover, in the cases of Leningrad and Manila, the slaughter of civilians caught in the battle zone reached into the hundreds of thousands—a result that would today carry with it catastrophic political consequences, at least for U.S. strategy and its decision makers.²

The historical picture is so wretched that it suggests that no one in his or her right mind could possibly ever want to commit military forces to combat in cities. In the case of First World powers, especially the United States, the cost both to one's own forces as well as to civilians within cities presents psychological and political barriers that seem to make it virtually impossible to fight directly for the control of cities in the twenty-first century, as occurred in the last century. In addition to the constraints of casualties and collateral damage, the geographic layout of cities negates most of the technological advances of the past several decades, including stealth, precision,

¹ Soviet casualties in the take down of Berlin in April–May 1945 appear to have been 304,887 killed, wounded or missing along with 2,156 tanks and Sp guns, 1,200 guns and mortars, and 527 combat aircraft—a butcher's bill that makes Eisenhower's decision to halt Allied forces on the Oder River an entirely sensible one. John Erickson, *Stalin's War with Germany*, vol. 2, *The Road to Berlin* (London, 1983), p. 622.

² The “mere” destruction of a Vietnamese village and the ensuing comment by a U.S. advisor that “we had to destroy it to save it” had a considerable impact on public perceptions of the war in the United States in the late 1960s.

communications, and intelligence, surveillance, and reconnaissance (ISR).³ Fighting in the urban environment would thus seem to offer a return to the urban brawls of industrial age war.

Unfortunately, Western military organizations had better think about the problems associated with fighting in urban terrain because they are going to be fighting there, like it or not. The increasingly urbanization of the world's population over the past half century, as many commentators have pointed out, also carries with it considerable consequences. The fundamental issues with urban operations have to do with two powerful facts:

- ▶ As Clausewitz suggests all too clearly when discussing conflicts of the past 2,500 years, war will continue to occur for political reasons, and cities will therefore become the target of significant military operations in the twenty-first century.⁴ In the final analysis, cities represent the heart of human political life, and victory over most states requires the occupation of their cities.
- ▶ In the early twentieth-first century, the increasing spread of human habitation means that complex urban terrain will confront armies wherever they conduct military operations—and not just in cities. Thus, one might conduct a major military operation that entirely misses the major cities of an opponent. Yet the capture of key logistical nodes, crucial terrain features, or road networks will require military forces to fight in the urban sprawl that spreads across the face of the world's continents.

These two factors form the heart of the issues that this paper will address in examining the future of military operations in urban terrain.

³ I am indebted to Joel Resnick of the JAWP for this point.

⁴ The disastrous Peloponnesian War began with a surprise strike by Theban elite troops against the city state of Potidea, a close ally of the Athenians. In the urban landscape of what would today be considered a relatively small town, the initial force of Thebans became disoriented, trapped, and then destroyed by the Potideans. See Thucydides, *History of the Peloponnesian War*, translated by Rex Warner (London, 1954), Book 2.

War in Cities: The Record in the Twentieth Century

History suggests much about the crucial importance of cities. The issue is not just whether increasing numbers of people around the world are moving into urban centers. Rather, the reality is that since the seventeenth century, armies have focused on the capture of cities in their military campaigns—not on the mere capture of terrain.⁵ This is the result of the fact that cities not only represent important financial and economic centers, but also represent the psychological heart of national resistance as well.

The twentieth century has seen cities as the focus of virtually all military operations. The Schlieffen plan of 1914 aimed not only at the destruction of the French Army, but the capture of Paris, France's administrative and political center.⁶ Similarly, the *Wehrmacht's* 1940 campaign aimed at the capture of Paris after the first blow had destroyed the Allied left wing in the Low Countries.⁷

At least in the minds of the German Army's leaders, if not their *Führer's*, OPERATION BARBAROSSA, the invasion of the Soviet Union in summer 1941, had Moscow as its most important goal.⁸ Well into the 1990s, many military analysts have supported the postwar contentions of German generals that had the *Wehrmacht* been

⁵ In the conduct of Allied operations in August 1944 after the breakout from Normandy, Eisenhower attempted to bypass Paris in the rush to the German frontier. But the political realities of France in 1944 as well as the attitudes of America's French allies quickly forced a change in plans and the commitment of the French 2nd Armored Division as well as U.S. forces to the liberation of the French capital. See Larry Collins and Dominique Lapierre, *Is Paris Burning?* (New York, 1965).

⁶ For discussions of the role of Paris in German planning for the Schlieffen Plan, see, among others, Holger Herwig, *The First World War, Germany and Austria-Hungary, 1914-1918* (London, 1997); Gerhard Ritter, *The Schlieffen Plan, Critique of a Myth* (New York, 1958); and Barbara Tuchman, *The Guns of August* (New York, 1962).

⁷ For the German consideration of a drive to the Channel Coast in 1940, had the initial crossing of the Meuse by the rifle regiments of the panzer divisions failed, see Williamson Murray and Allan R. Millett, *A War To Be Won, Fighting the Second World War* (Cambridge, MA, 2000), pp. 59-60.

⁸ The most thoroughly researched account on the German side remains Horst Boog et al., *Das Deutsche Reich und der Zweite Weltkrieg, Der Angriff auf die Sowjetunion* (Stuttgart, 1983).

allowed to capture Moscow in fall 1941 instead of being diverted to the Ukraine by Hitler's strategic and economic interests, the Soviet Union might well have collapsed.⁹ The following year found the Germans entangled in a massive effort to capture Stalingrad on the banks of the Volga—a battle that resulted in a major defeat for German arms.¹⁰ At the same time that the Germans were stalled in front of Moscow, the Japanese began their great offensive into Southeast Asia. Here again military operations focused on the capture of major cities: Manila in the Philippines, Singapore in Malaya, and Rangoon in Burma.

When the Allies went over to the offensive in 1943, their operations likewise centered on the capture of major cities as intrinsic to strategic and political goals. From 1943 through spring 1944, Rome represented a glittering prize for British and American forces fighting on the Italian peninsula. In fact, the American ground forces commander, General Mark Clark, was so enamored by the vision of capturing Rome that he allowed the German Tenth Army to escape while he drove his American troops to capture the eternal city in June 1944.¹¹ Early the following year, General Douglas MacArthur enthusiastically threw his U.S. Army divisions into a major effort to liberate Manila from the Japanese.¹²

And in the final collapse of the Third Reich, the Soviets suffered horrendous casualties in capturing Berlin. As the Red Army approached Berlin, Winston Churchill, prime minister of Britain, pleaded with General Eisenhower to get Allied forces to the German capital before the Soviets. By the end of the war the Soviets

⁹ That is not the view of this author, but the capture of Moscow would certainly have placed the German Army in more defensible positions over the terrible winter of 1941–1942. But one might also note that a German drive that reached Moscow might also have resulted in a bloodbath equal to that experienced by the Sixth Army at Stalingrad in fall 1942.

¹⁰ For the Stalingrad campaign as well as the ferocious fighting that took place in the city's urban terrain, see Horst Boog et al., *Das Deutsche Reich und der Zweite Weltkrieg. Die Ausweitung zum Weltkrieg und der Wechsel der Initiative, 1941-1943* (Stuttgart, 1990).

¹¹ See Dominick Graham and Shelford Bidwell, *Tug of War, The Battle for Italy, 1943-1945* (New York, 1986), pp. 335-341.

¹² For an account of MacArthur's decision, see Williamson Murray and Allan R. Millett, *A War To Be Won, Fighting the Second World War* (Cambridge, MA, 2000), pp. 495-500. For the destruction of Manila, see Alfonso J. Aluit, *By Sword and Fire: The Destruction of Manila in World War II, 3 February--3 March 1945* (Manila, 1994). See also Richard Connaughton, John Pilmott, and Duncan Anderson, *The Battle for Manila* (London, 1995).

had "liberated" not only Berlin but Budapest, Prague, and Vienna. Churchill argued strongly after the war that the Western Powers had made a serious political mistake in allowing the Soviets to capture all the great capitals of Central Europe.¹³

The post-World War II period has seen a continued emphasis in military operations to capture, hold, or deny cities against enemy military forces. Seoul became a great battle-ground in fall 1950 as Marines and soldiers wrecked the Korean capital in their efforts to liberate it.¹⁴ During the following year, UN and communist forces fought over the wreckage twice more before the Americans finally liberated it for good in spring 1951. In 1968 the Communist North Vietnamese and their local supporters, the Viet Cong, launched the Tet offensive, aimed at encouraging popular uprisings that would lead to the capture of South Vietnam's cities including Saigon and the ancient capital of Hue. The attacks failed to result in a popular uprising in Saigon, although the television images of the fighting in that city, as Communist commandos reached the doors of the American embassy, had a profound affect on the willingness of the American people to continue their support for the war. In the case of Hue, the North Vietnamese succeeded in capturing much of the city and forced their American and South Vietnamese opponents into a lengthy and politically debilitating siege.¹⁵

While the Gulf War did not result in any significant fighting in cities since the Iraqis abandoned Kuwait City without a fight, America's other major military commitments in the last decade and a half have resulted in combat in cities. OPERATION JUST CAUSE in 1989 focused U.S. operations on the capture of Panama City to overthrow Noriega's thuggery. Similarly, the ill-fated American and UN effort to suppress tribal gangs in Somalia resulted in the shootout in Mogodieshu, Somalia, and the deaths of eighteen American soldiers.

¹³ From the perspective of a decade after the end of the Cold War, Churchill's arguments appear less persuasive, particularly when one considers the casualties suffered by the Soviets in taking those cities.

¹⁴ T.R. Fehrenbach's *This Kind of War* (New York, 1964) still remains the classic account of all aspects of the Korean War.

¹⁵ For a popular account of the fighting in Hue, see Eric Hammel, *Fire in the Streets: The Battle for Hue, Tet 1968* (New York, 1996).

Outside of the American experience, cities have played an equally important role in the military history of the last half of the twentieth century. The Battle of Algiers resulted in a major French victory over the Algerian FLN in the late 1950s.¹⁶ But the resulting publicity over French methods in gaining that victory played a major role in undermining the political support in France required to continue the conflict. Russian efforts to destroy the Chechen Republic, first in 1994 and then beginning again this past year, have focused on the capture of Grozny even after it had become a worthless pile of rubble.

This brings us to the crucial question of what it is about cities that makes their capture so important to the conduct of military operations. From a military perspective, the most obvious is the fact that cities and towns, even in some cases relatively small centers of urbanization, offer the key to the logistical and operational landscape. Field Marshall Bernard Montgomery concentrated British and Canadian military operations in the first month of OPERATION OVERLORD on the capture of the Norman city of Caen. Its capture would allow the Allies to control the road network in eastern and southern Normandy and to fight the main battle east of the densely networked, hedge-covered bocage country.¹⁷

Later in 1944, Montgomery's greatest failure came when his Twenty-First Army Group captured the port of Antwerp in undamaged condition in early September 1944, but neglected to open up the Scheldt River up for eighty-five days.¹⁸ Montgomery's failure placed a severe logistical crimp in the ability of Allied armies to project military power across the Franco-German borderlands. In the end, it was a major factor in prolonging the war into spring 1945.¹⁹ Thus, the most obvious importance of cities lies in their placement on the geographic and logistical landscape. They are the essential components in the movement of people and goods

¹⁶ The movie *Battle of Algiers* remains a must see for anyone concerned with understanding a war against terrorists within the confines of a city. The Battle of Algiers is examined by Alistair Horne in his masterful history of the Algerian conflict, *A Savage War for Peace, Algeria 1954-1962* (New York, 1967).

¹⁷ See, among others, Carlo D'Este, *Decision in Normandy* (New York, 1983) and Max Hastings, *Overlord, D-Day and the Battle for Normandy, 1944* (London, 1984).

¹⁸ For the dismal results of Montgomery's inaction in early September see in particular R.W. Thompson, *The 85 Days, The Story of the Battle of the Scheldt* (New York, 1957).

¹⁹ See Williamson Murray, "A World in the Balance," *Military History Quarterly*, Autumn 2000.

over the surrounding terrain. All major transportation networks link cities and towns. Roads and railroads funnel military operations to and through urban terrain. This reality will obviously not change in the next century.

But cities also possess a political and psychological importance that transcends their specific industrial and economic importance. The British held the North African port of Tobruk in Libya for the last half of 1941, partially because of the difficulties its possession caused the *Afrika Korps* logistics and its ability to conduct operations against Egypt. But the dogged resistance of the Tobruk garrison eventually took on an importance of its own in terms of Allied perceptions and propaganda.²⁰ Those perceptions led Churchill in June 1942 to make the serious mistake of asking his commanders in the Middle East to hold the port after the disastrous defeats in the Gazala battles allowed Rommel to move against Egypt. The result was another British defeat as Rommel launched a surprise attack against the ill-prepared garrison at Tobruk.

Several months later in August 1942, the Germans began massive efforts to drive the Red Army out of Stalingrad. The strategic and geographic importance of "Stalin's city" in controlling the traffic on the Volga had been a major factor in German strategic planning for OPERATION BLAU (OPERATION BLUE) that aimed to break the Soviet Union off from the vital oil supplies coming out of the Caucasus. But the fighting for the city soon took on a life of its own as Hitler came to view the battle as a contest of wills between himself and Soviet dictator Joseph Stalin. Thus, the Germans threw their reserves into a battle that soon produced casualty levels well beyond any reasonable expectations of gains. In the end, the cost to the *Wehrmacht* was a level of attrition it simply could not maintain, and the Soviets were able to surround the city and destroy the German Sixth Army.

In the largest sense, cities have become identified with national existence. Paris, especially in the eyes of the Parisians, is France, and on it rests the fate of the French nation. In 1940, the fall of the capital signaled to French military and political leaders

²⁰ Major General I.S.O. Playfair, *The Mediterranean and Middle East*, vol. 3, September 1941 to September 1942, *British Fortunes Reach Their Lowest Ebb* (London, 1960), pp. 244-275.

(as well as most Frenchmen) that the war against Germany was lost.²¹ Thus, British efforts to persuade French leaders to abandon metropolitan France and continue the war from France's colonial empire fell on deaf ears. Only an obscure French brigadier general, Charles de Gaulle, was willing to assume the mantle of continued resistance and continue the struggle against the Germans outside of occupied France.

The failure to take cities may also have powerful unintended consequences. In 1982, the Israelis failed to seize Beirut after their stunning successes in the Bekka Valley, undoubtedly wary of the casualties their forces might suffer in the effort. Instead, they were content to bombard the city by air and artillery from afar. The resulting television coverage on CNN and other networks resulted in a political disaster that seriously affected Israel's relations even with its closest friend, the United States.

²¹ For the French reaction to the defeats in May 1940 and their belief that the war was lost with the fall of Paris, see P.M.H. Bell, *A Certain Eventuality* (London, 1974); and Eleanor M. Gates, *End of the Affair, The Collapse of the Anglo-French Alliance, 1939-1940* (Berkeley, 1981).

Operations in Urban Terrain

Much of the attention of U.S. military circles over the past decade has focused on something titled *urban operations*. This term, as suggested in the introduction to this report, conjures up visions of Stalingrad, Manila, Hue, and other nightmarish scenes from the twentieth century. To a great extent, the result has been an “either-or” debate: American military forces will or they will not do cities. In effect, history hangs over the debate like a dark cloud; no matter how ahistorical Americans may be, they do at least understand what Stalingrad meant to the Germans—the burial ground of an army—while memories of Manila, Seoul, and Hue still remain a distinct collective memory in the culture of the U.S. military.

At times there may be no choice in the matter. In coming decades, U.S. forces will find themselves committed to fighting in major cities, where the political and strategic issues are overriding and where the political will demands such commitment. And there should be little doubt that the results will lead to considerable collateral damage and casualties.²² Both will occur at a level that will bring unpleasant political repercussions no matter how much technology U.S. forces bring to the fight.

But there is another unpleasant reality that history suggests: *the problem of urban terrain*. The Marines have been quite right to suggest that the urbanization of the landscape across the world has been an increasing phenomenon over the past half-century. The countryside has been moving to the cities, whether one talks about the Third World or the First World. And that fact has major implications for the conduct of military operations, however much First World military organizations, including those of the United States and their leaders, may wish to stay outside of major cities. Moreover, it is difficult to picture where cities end and non-urban zones begin. Where do Lagos, or Karachi, or Bombay—or, for that matter, Washington DC,

²² The level of collateral damage and civilian and military casualties will, of course, depend to a great extent on how well the U.S. Services have prepared their forces to fight in cities.

actually end? And how will military organizations conduct operations that stop short of the endless urban terrain that surrounds the heart of cities?

But there is another side of the coin and that is the fact that urban terrain is not limited to great cities themselves but is a reality of the towns, villages, and suburbs across the geographic landscape of human habitation. Mid-sized towns and villages have exercised as crucial an impact on the conduct of military operations in the twentieth century as the great cities such as Singapore, Stalingrad, Manila, Seoul, Hue, and Beirut. Three examples drawn from the Second World War provide more than ample evidence that urban terrain has been a major factor in the past in the conduct of military operations. These three cases are Dieppe, Caen, and the military operations conducted by the U.S. Army in April 1945 across the heartland of Nazi Germany.

Dieppe In summer 1942, as part of Winston Churchill's policy of harassing the coasts of Nazi-occupied Europe, Canadian and British troops carried out a major raid against the small French resort town of Dieppe, which lies on the English Channel. However, this attack was far more than a raid. Instead it was a major military operation, conducted by ground forces that numbered well over a brigade. The objective was to seize and hold Dieppe while destroying German installations lying in the immediate vicinity, such as the airfield, radar site, and power station.²³ The larger objective, however, was to determine the difficulty the Allies would confront in seizing a port when they sought to establish a permanent foothold on the European continent.

Dieppe is a narrow coastal town of no great depth, lying at the end of a draw reaching down to the Channel. The town itself fronts on the sea with a two-foot sea wall in front of the beaches. In August 1942 one German infantry regiment of the 302nd Infantry Division defended Dieppe and the heights lying on both sides of the town. The 302nd consisted of third-class troops with a strength of under 2,000 men, many of whom were still undergoing basic infantry training.²⁴ While the defenders possessed some artillery, they had no tanks; the defenses consisted of the town's

²³ J.R.M. Butler, *Grand Strategy*, vol. 3, part 2, *June 1941-August 1942* (London, 1964), p. 639.

²⁴ *Ibid.*, p. 639.

buildings, although the Germans had blocked off the roads leading from the sea wall into French countryside.

On the Allied side, the Canadians, who attacked the port itself, brought 4,961 men to the fight. They were supported by a number of destroyers and thirty tanks in the first wave. Meanwhile, another one thousand-plus British Commandos and U.S. Rangers assaulted German defensive positions on the flanks.²⁵ Despite this overwhelming superiority, as well as the fact that the attacking Allied units consisted of elite troops, the raid was a catastrophe. The Canadians and their tanks never got off the beaches. The Germans laid down a withering fire from defensive positions in Dieppe's buildings; while Allied tanks got across the sea wall, they got no further. The Royal Regiment of Canada suffered particularly heavy casualties—twenty-six out of twenty-nine officers, and 459 out of 516 soldiers, killed, wounded, or missing.²⁶ Most of the Canadians had to be abandoned where they had landed, either as dead, wounded, or prisoners.

With no special defensive preparations other than those undertaken by defending infantry, the Germans had stopped the attack cold. Obviously the urban terrain and built-up areas of the port had provided an ad hoc fortified zone necessary to crush a landing by superior forces. The larger point here is that a few simple beachfront two- and three-story buildings were not only sufficed to prevent the Allied raiding force from getting beyond the town to wreck the facilities, the airfield, and the other targets, but they also entirely shut down the possibility of maneuver by the raiding forces and left them in murderously indefensible positions.

In the long run, there was considerable benefit to the Dieppe defeat. The Western Allies drew the crucial lesson that in the upcoming invasion of Europe, OPERATION OVERLORD, they would have to attack across open beaches. *They would not be able to seize any port for the first several weeks of the invasion*—a fact that had important consequences in creating the massive logistical framework of Mulberry Harbors²⁷ and other over-the-beach supply support that made the invasion successful. After

²⁵ Captain S.W. Roskill, *The War at Sea, 1939-1945*, vol. 2, *The Period of Balance* (London, 1956), p. 243.

²⁶ *Ibid.*, p. 247.

²⁷ Pre-fabricated harbors of steel and concrete, used successfully in the Normandy invasion.

August 1942, no Allied planner could think about the capture of a French port by a direct assault even though the immediate capture of a port would substantially have eased the logistic difficulties confronting the planning of the Normandy campaign. But Dieppe had demonstrated that the urban terrain of a port made its capture virtually impossible during the period of the initial landings.

Caen There has much controversy over the conduct of Allied military operations once British, Canadian, and American forces established a successful beachhead on the Norman coast in June 1944. But whatever the conception was of the ground component commander, Montgomery, for the coming campaign—whether to use his Commonwealth forces to hold the Germans in eastern Normandy while the Americans forced the issue in western Normandy, or whether he hoped to break out into the more open terrain to the south and east of Caen and fight the main battle with his Commonwealth troops, while the Americans opened up the French ports—the capture of Caen was essential to early movement out of the invasion lodgement and the conduct of further operations.²⁸

As the center of the French road network running from Paris to the Channel coast in Normandy, Caen was key to the conduct of the British First Army's ability to fight any sort of a mobile battle against the Germans. Thus, it is not surprising that Montgomery's plans for Overlord called for the town's capture by the end of the invasion's first day. With Caen in their hands, British forces would have had room to maneuver and support efforts to break out into the open. Unfortunately, British and Canadian troops, under considerable pressure from the moment they landed, did not get to Caen on 6 June 1944. It was not so much the effectiveness of German resistance, but the lethargy of having accomplished the exceedingly difficult task of making a successful lodgment against a tenacious and effective opponent that robbed the British and Canadians of the energy required to push on to Caen. One Canadian battalion had an open road into the town in the late afternoon, but when the battalion commander requested permission to move into the city, his brigade

²⁸ For the argument that Montgomery was planning to fight the main battle south and east of Caen, see Chester Wilmont, *The Struggle for Europe* (New York, 1952).

commander denied him permission because it was not in the plan for the Canadians to seize Caen.²⁹

That night, elements of the 12th SS Panzer Division, *Hitlerjugend*, pushed into and through Caen and immediately set about establishing defensive positions on the town's outskirts. It is worth noting that up to this point, the Germans had undertaken no measures to defend Caen against a major Allied assault. Confronted by a series of ferocious counterattacks against the beach head, the British first attempted to encircle Caen from the west. However, a disastrous setback at the hands of German Tiger tanks at Villars Bocage led the British First Army to undertake a series of attacks on Caen to drive the murderous juvenile fanatics of the *Hitlerjugend* out of the town and seize the road network leading to the south and east.³⁰

However, it would take well over a month of intense fighting for Montgomery's troops to drive the Germans out of Caen. By that time, heavy Allied air attacks and massive artillery bombardments had turned the town into a rubble-strewn landscape. Not until the OPERATION CHARNWOOD on 7 July did the British gain the northern half of Caen. While British firepower undoubtedly killed a good many Germans, it probably significantly aided the defending Wehrmacht troops by creating even more obstacles and defensive positions for the advancing British to overcome. One historian describes the results of a great effort by Bomber Command to open the way for the attacking British ground troops in early July in the following terms:

In reality, the devastation wreaked upon the ancient and once beautiful city of Caen did little materially to assist in its capture. Quite the contrary, the bombing in some instances inhibited the progress of some I Corps units attempting to traverse the size of small hills; in places what had once been streets were now gaping holes.³¹

²⁹ I am indebted to the Canadian official military historian, William McAndrew, for this story.

³⁰ For the disastrous destruction of a British armored brigade in the urban terrain of the small French village of Villars Bocage by a single Tiger tank under the command of the German tank ace, Michael Wittman, see Hastings, *Overlord, D-Day and the Battle for Normandy, 1944*, pp. 132-135.

³¹ Carlo D'Este, *Decision in Normandy* (New York, 1983), pp. 315-317.

The whole of the city south of the river did not fall completely into British hands until OPERATION GOODWOOD on 18 July. By then, possession of Caen's road network made no difference since there was nothing left of either the town or the roads. Had the British captured Caen in the early days of the invasion, they would have been able to put significantly greater pressure on the Germans. Certainly the Germans would not have been able to wage their great defensive battle from the town's wreckage. Caen's road net would have been of great advantage in June, but the very nature of urban terrain reinforced the defensive efforts of the 12th SS Division and its supporting elements. In the end, Montgomery had to tackle Caen and its urban terrain because of Normandy's geography and the requirements of his campaign.

Germany 1945

In March 1945, Allied armies closed up the Rhine as German forces collapsed as a result of their heavy losses in men and equipment suffered in the Battle of the Bulge and subsequent Allied counterattacks. For American and British forces, the months of January, February, and March involved some of the most intense fighting they engaged in during the course of the military campaigns in the European Theater of Operations (ETO). In January, U.S. forces in the ETO suffered 12,187 battle deaths; in February, 9,008; and in March 13,036—monthly totals that closely replicated the monthly casualties of 1944 from June onward.³²

During these months, U.S. forces advanced at a relatively slow pace—at least in comparison to the extraordinarily swift breakout of August 1944 from Normandy. German resistance along the defensive zones of the West Wall and in the heavily forested and hill terrain of western Germany proved tenacious, skilled, and effective. Only bloody sacrifices by the Allies opened the way to the Rhineland and the Reich's heartland. But the traditional historical view has been that the grinding battles of fall and winter 1944–1945 finally broke the *Wehrmacht's* back.

Certainly, the movement of U.S. forces in April seems to support that historical view. To put it simply, the armored and motorized infantry of the U.S. Army went on a

³² Battle and Nonbattle Deaths, U.S. Army, *Statistical Compendium*, U.S. Army Military History Institute, Carlisle Barracks, Carlisle, PA.

rampage. The spearheads of the First and Ninth Armies encircled the Ruhr and then drove deep into central Prussia to create a bridgehead over the river Oder, where they linked up with the Red Army. Patton's Third Army drove across the Rhine and all the way to the Czech frontier where it was positioned to capture Prague before it was ordered to move south instead. Similarly, troops from the U.S. Sixth Army drove across Bavaria and on into Austria, while the 101st Airborne was able to liberate Göring's wine cellar at Berchtesgaden.

But what appears to be an anomaly in that great, rapid, and—in the end—decisive campaign is the fact that U.S. casualties dropped hardly at all in April. No less than 10,677 U.S. army soldiers died as a result of combat action in that month in the ETO—over 1,500 more than had died in February.³³ How to account for these high numbers in a month of such victories? To a great extent the answer lies in the losses suffered by American infantry, tankers, artillery men, and engineers in taking the towns and villages that lay along the roads of western and central Germany. And those villages and towns represented urban terrain as much as any German city in the Ruhr—in fact perhaps more so since by this time in the war Allied bombs had completely flattened most of Germany's major cities. The maintenance of those great advances required that U.S. forces drive out the fanatical wreckage of the *Wehrmacht* to maintain the supply lines to the rear. And each one of those villages and towns cost the divisions and regiments of the U.S. Army a price in the blood of their men.

The bottom line is that urban terrain is *not* confined to cities. The *Wehrmacht* may not have retained any mobility by April 1945, and so its troops died in place. But holed up in the towns and villages, which the Americans needed to keep pace of their drive going, German troops, some of them no more than teenaged boys, extracted a terrible price through to the end of the month.

³³ Ibid.

Conclusion

The historical record certainly suggests that U.S. ground forces will find themselves engaged in military operations that will involve fighting in urban terrain. In fact, it is likely that cities will lie at the center of U.S. military operations, if for no other reason than they are important politically for our opponents. It is not just that cities will be any bigger or that there will be more of them. Rather it will be that cities will continue to represent the physical geography and battle space that matters. It is there where U.S. military forces will find their opponents.

Even more important is the fact that cities will dominate the geography of the human mind. If Clausewitz is right that war is the continuation of politics by other means, then cities will represent the political goals for which countries will fight throughout the twenty-first century. In 1991, the public perception of the success of the Desert Storm campaign did not lie in the liberation of Kuwaiti deserts and oil fields, but in the liberation of Kuwait City—for what mattered was the political entity, not blowing sands. One might also note that the very CNN effect so decried by the U.S. military will also affect the decision to go or not to go into cities. In 1945, General MacArthur committed U.S. troops to driving the Japanese marines out of Manila. As a result, he is often criticized for the resulting terrible casualties that the Filipinos suffered.

What MacArthur's critics of his operations in the Philippines in 1945 often miss is the question of whether the general could have avoided the commitment of U.S. troops had the Japanese begun to slaughter the Filipinos and American prisoners of war. In the next century, it is simply not going to be a question of stopping on the outskirts of major cities and waiting for matters to sort themselves out. The politics that form the framework of all conflict will inexorably lead the United States into the urban terrain of cities, towns, and villages.

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